#### Message

From: Sinks, Tom [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=001007B7D256453A8A19B91DF704E22C-SINKS, TOM]

**Sent**: 6/11/2018 3:10:51 PM

To: Benforado, Jay [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e3adeee7efce4889992919103f16e006-Benforado, Jay]; Greene, Mary

[/o=ExchangeLabs/ou=Exchange Administrative Group

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(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9bd641d949d4a96b2d6c307be288afa-Nelson, Dan]

Subject: RE: NYT article on science

#### Personal Matters / Ex. 6

From: Benforado, Jay

Sent: Monday, June 11, 2018 10:54 AM

**To:** Sinks, Tom <Sinks.Tom@epa.gov>; Greene, Mary <greene.mary@epa.gov>; Anand Mudambi <Mudambi.Anand@epa.gov>; Grifo, Francesca <Grifo.Francesca@epa.gov>; Cogliano, Vincent

<cogliano.vincent@epa.gov>; Nelson, Daniel K. <Nelson.Daniel@epa.gov>

Subject: NYT article on science

https://www.nytimes.com/2018/06/09/climate/trump-administration-science.html

# In the Trump Administration, Science Is Unwelcome. So Is Advice.

As the president prepares for nuclear talks, he lacks a close adviser with nuclear expertise. It's one example of a marginalization of science in shaping federal policy.



President Trump is the first president since 1941 not to name a science adviser. Credit Tom Brenner/The New York Times

### By Coral Davenport

June 9, 2018

WASHINGTON — As President Trump prepares to meet Kim Jong-un of North Korea to negotiate denuclearization, a challenge that has bedeviled the world for years, he is doing so without the help of a White House science adviser or senior counselor trained in nuclear physics.

Mr. Trump is the first president since 1941 not to name a science adviser, a position created during World War II to guide the Oval Office on technical matters ranging from nuclear warfare to global pandemics. As a businessman and president, Mr. Trump has proudly been guided by his instincts. Nevertheless, people who have participated in past nuclear negotiations say the absence of such high-level expertise could put him at a tactical disadvantage in one of the weightiest diplomatic matters of his presidency.

"You need to have an empowered senior science adviser at the table," said R. Nicholas Burns, who led negotiations with India over a civilian nuclear deal during the George W. Bush administration. "You can be sure the other side will have that."

The lack of traditional scientific advisory leadership in the White House is one example of a significant change in the Trump administration: the marginalization of science in shaping United States policy.



Kim Jong-un, the North Korean leader, attending a performance in Pyongyang last year honoring nuclear scientists and technicians. CreditKorean Central News Agency

There is no chief scientist at the State Department, where science is central to foreign policy matters such as cybersecurity and global warming. Nor is there a chief scientist at the Department of Agriculture: Mr. Trump last year nominated Sam Clovis, a former talkshow host with no scientific background, to the position, but <a href="https://example.com/heavisian-repartment">heavisian-repartment</a> and no new nomination has been made.

These and other decisions have consequences for public health and safety and the economy. Both the Interior Department and the National Oceanic and Atmospheric Administration have disbanded climate science advisory committees. The Food and Drug Administration disbanded its Food Advisory Committee, which provided guidance on food safety.

Government-funded scientists said in interviews that they were seeing signs that their work was being suppressed, and that they were leaving their government jobs to work in the private sector, or for other countries.

After Mr. Trump last year withdrew from the Paris climate agreement, the international pact committing nations to tackle global warming, France started a program called "Make Our Planet Great Again" — named in reference to Mr. Trump's slogan, "Make America Great Again" — to lure the best American scientists to France. The program has so far provided funding for 24 scientists from the United States and other countries to do their research in France.

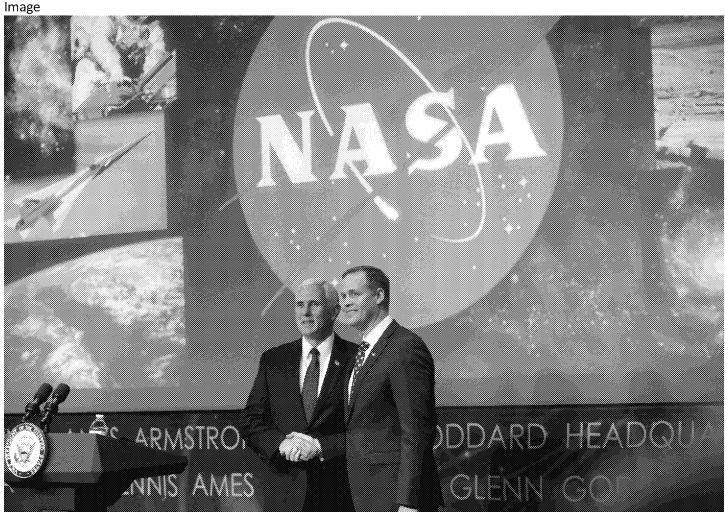
The White House declined to comment on these and other suggestions that the role of science in policymaking has been diminished in the Trump administration. Regarding the

coming talks with Mr. Kim, a spokesman for the White House's National Security Council, Garrett Marquis, emphasized that "the president's advisers are experts in their fields."

The larger matter, though, is the president's lack of a close senior adviser at the White House level, someone who has Mr. Trump's trust and his ear, said Michael Oppenheimer, a professor of geosciences and international affairs at Princeton.

"I don't think there's ever been a time in the post-World War II period where issues as important as nuclear weapons are on the table, and there is no serious scientist there to help the president through the thicket," he said. "This reverberates throughout policy."

There are exceptions to the retreat from science. In April, scientists bristled when Jim Bridenstine, a former Republican congressman from Oklahoma who is not a scientist, <u>took over the National Aeronautics and Space Administration</u>. Mr. Bridenstine had questioned whether human activity is the primary cause of global warming.



Jim Bridenstine, right, with Vice President Mike Pence at his swearing-in as NASA administrator in April Credit Pablo Martinez Monsivais/Associated Press

But last month Mr. Bridenstine <u>testified before a Senate committee</u> that he had experienced a climate-science conversion. Asked if he believed greenhouse gases are the primary cause of the warming planet, he responded, "Yes."

His own agency, he said, has found it "extremely likely that human activity is the dominant cause of global warming, and I have no reason to doubt the science."

Mr. Bridenstine described his views as an "evolution."

Moments like these are not the norm, however. More than 1,000 members of the National Academy of Sciences <u>signed a statement in April</u> criticizing the Trump administration's decision to withdraw the United States from the Paris Agreement. "The dismissal of scientific evidence in policy formulation has affected wide areas of the social, biological, environmental and physical sciences," the statement said.

The most pressing geopolitical need may be in the realm of nuclear diplomacy.

While the State Department declined to characterize the makeup of its preparatory team for the North Korea meeting, <u>set for Tuesday in Singapore</u>, Mr. Trump could of course tap any number of government nuclear physicists to accompany him.

And Mr. Marquis, the National Security Council spokesman, emphasized that many of the president's advisers "have advanced degrees and have worked on these complex issues in and out of government."

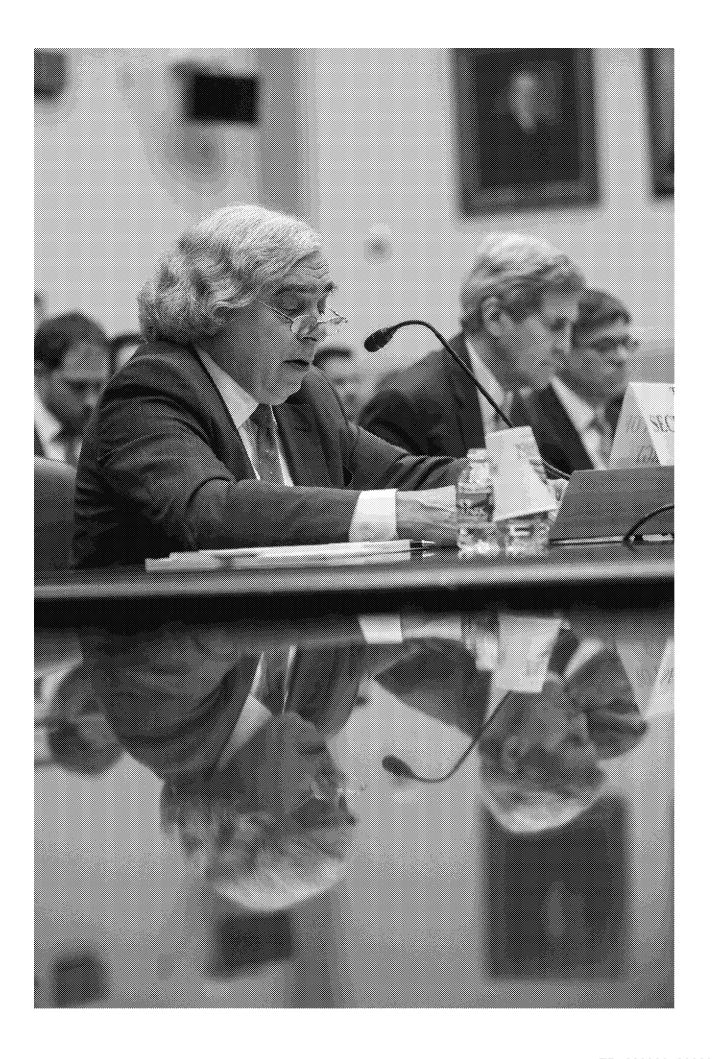
"The materials that have gone to the president ahead of the negotiation reflect the work of more than a dozen people at the Ph.D. level in relevant fields," he added, including "at least one" in nuclear engineering.

A State Department spokeswoman referred questions to the National Security Council.

Nevertheless, as Mr. Trump prepares for the talks, he has no close aides on par with those who helped President Barack Obama negotiate a nuclear deal with Iran. Mr. Obama's advisers included Ernest J. Moniz, a nuclear physicist who led the Energy Department and oversaw the nation's nuclear weapons arsenal, and John Holdren, a physicist and expert in nuclear arms control who served as the White House science adviser.

"There is going to be the requirement for trade-offs, and that judgment is best made by people with technical expertise who are also very senior politically," Mr. Moniz said. "That just does not exist in this administration."

Image



Ernest J. Moniz, left, an energy secretary under President Barack Obama, testifying at a congressional hearing on the Iran nuclear deal in 2015. Credit Zach Gibson for The New York Times

Of course, Mr. Trump was an outspoken critic of Mr. Obama's Iran deal and <u>withdrew</u> from it last month.

As for Mr. Kim's advisers, "The North Korean nuclear scientists are very, very competent and I would expect them to advise their government well," said Siegfried S. Hecker, a former director of the Los Alamos weapons laboratory in New Mexico and an expert on North Korea's nuclear weapons program.

## Ground Zero: The E.P.A.

In Washington, the administration's excising of science is particularly evident at the Environmental Protection Agency.

Scott Pruitt, the embattled head of the E.P.A., is the subject of <u>at least 12 government investigations</u> into his first-class travel, costly security detail and management of the agency. At the same time he has won praise from Mr. Trump for his speed at rolling back environmental regulations.

Mr. Pruitt has initiated more than a dozen regulatory rollbacks, including signing a measure <u>declaring his intent</u> to undo or weaken Mr. Obama's climate change regulations known as the Clean Power Plan.

However, his more enduring legacy may be in diminishing the role of academic, peer-reviewed science at the agency. "It's not Pruitt's exorbitant spending, but rather a lot of these less sexy things they're quietly doing on science that will cause the real long-term damage," said Gretchen Goldman, the research director for the Center for Science and Democracy at the Union of Concerned Scientists, a nonprofit group.



Scott Pruitt, the Environmental Protection Agency administrator, has won praise from Mr. Trump for his speed at rolling back environmental regulations. Credit Tom Brenner/The New York Times

Mr. Pruitt has begun to systematically change how the E.P.A. treats science. In April, he proposed a regulation that would <u>limit the types of scientific research</u> that E.P.A. officials could take into account when crafting new public health policies, a change that could weaken the agency's ability to protect public health.

The new rules would require that the data from all scientific studies used by the E.P.A. to formulate air and water regulations be publicly available. Mr. Pruitt has touted that as a step toward increasing scientific transparency. "The era of secret science at E.P.A. is coming to an end," he said in a statement. "The ability to test, authenticate and reproduce scientific findings is vital for the integrity of rule-making process."

However, the change could sharply limit the research available to the E.P.A., because health studies routinely rely on confidential data from individuals.

Last year, Mr. Pruitt <u>significantly altered two major scientific panels</u> that advise the E.P.A. on writing public health rules, restricting academic researchers from joining the boards while appointing several scientists who work for industries regulated by the E.P.A.

These and other changes "will diminish the characterization of pollution as risky," said William K. Reilly, who headed the E.P.A. under the first President George Bush. "This

tolerance for more exposure to pollution is altogether different from anything we are used to."

In a statement defending the changes to the committees, Jahan Wilcox, an E.P.A. spokesman, said that the agency "sought a wider range of voices" and "was thrilled with the response of over 700 applicants." The boards, he said, are not only highly qualified but also "independent and geographically diverse."

This year, Mr. Pruitt sent a memo to the E.P.A.'s Clean Air Scientific Advisory Committee ordering steps that could effectively diminish the role of scientific evidence in air pollution enforcement. The committee is required by law to prioritize the health effects of pollution, but Mr. Pruitt's memo orders it to consider potential economic consequences of meeting tighter clean-air rules — for example, the possibility that tougher pollution standards could make air-conditioning more expensive, leading to more deaths from heat.

"This memo flouts the clear evidence of medical science," said John Walke, an expert in clean-air policy at the Natural Resources Defense Council, an advocacy organization. "Pruitt wants to set a definition of clean air that is medically unsafe."

The agency, after heavy lobbying by the chemicals industry, is also in the process of scaling back the way the government determines risks associated with dangerous chemicals, The New York Times <u>recently reported</u>.

Image



A protester during the March for Science in Washington last year.CreditBill Clark/CQ Roll Call, via Getty Images

## Jettisoning 'Guidance' Files

A little-noticed change at the Justice Department could have far-reaching impact on the role of science in federal policy across the government.

This year the Justice Department <u>announced it would no longer use "guidance documents,"</u> which are written by experts at other agencies, to enforce laws. "This change makes a lot of the big, science-based laws unenforceable," said Dr. Goldman of the Union of Concerned Scientists.

For decades, enforcement of major health and environmental laws — including the Clean Air Act, Clean Water Act, Endangered Species Act and laws governing food safety and exposure to chemicals — has relied heavily on guidance documents written by scientists at the E.P.A., Agriculture Department, Food and Drug Administration and other agencies that supply the specific interpretation of how to carry out the laws. Guidance documents might, for instance, detail how industries should monitor and report their pollution, or how food makers should watch for food-borne illnesses.

A spokesman for the Justice Department said in an email that the new guidance policy would not affect the enforcement of science-based laws. "The Department of Justice continues to aggressively and successfully enforce the nation's laws, including environmental and health laws," the spokesman said, on condition of anonymity because he was not authorized to speak on the record. "Assertions to the contrary are incorrect."

At the Department of Agriculture, the agency is redefining part of its core mission, the scientific monitoring of food safety, to emphasize promoting exports of American farm products. Last year, the agency's secretary, Sonny Perdue, <u>created</u> a new under secretary of trade to push exports worldwide. He also moved an office devoted to international food-safety issues from the agency's Food Safety and Inspection Service to its new Trade and Foreign Agricultural Affairs office.

Putting the management of food safety under the aegis of trade, rather than science, "undermines the whole history that the U.S. has for science-based standards for food," said Catherine E. Woteki, a former chief scientist at the agency from 2010 to 2017.

Image



Ted McKinney, left, at his swearing-in as under secretary for trade and foreign agricultural affairs at the Agriculture Department, with Sonny Perdue, the agency's chief. CreditUnited States Department of Agriculture

A department spokesman said the decision to move the office, known as Codex, came in response to aggressive trade measures by other countries, and that food safety would not be affected.

The agency "makes decisions based on sound science, data and evidence," said the spokesman, Tim Murtaugh. "Unfortunately, we have seen other nations use food safety standards as weapons in trade relations, manipulated for protectionist purposes," he said. "Moving Codex to the mission area where U.S.D.A. coordinates all international activity simply makes sense."

# **Scientists Resign**

The Interior Department secretary, Ryan Zinke, is working to carry out Mr. Trump's campaign pledge to open public lands to extract oil, gas and coal. At the same time, though, his agency has pulled back from examining the health risks to fossil fuel workers.

In August, the department <u>halted a study</u> by the National Academies of Sciences, Engineering and Medicine into links between surface mining and health, specifically the exposure to coal dust in the air and drinking water. "We never got a clear reason why it was canceled," said Marcia McNutt, president of the National Academy of Sciences.

Her organization reached out to other possible donors to continue funding it, said Dr. McNutt, but was unable to find takers. "If the government didn't want to know the answers, it was hard to justify funding this," she said.

Several Interior Department scientists have resigned to protest actions like these that are perceived as undermining research.

Last June, at least two dozen senior career officials at the department <u>were told they would</u> <u>be reassigned to new positions</u>. While it is not unusual for new administrations to make personnel moves, some said the moves appeared intended to undermine the department's environmental research.

Among them was Joel Clement, a climate change scientist who was reassigned to an office overseeing fees from fossil fuel drilling. He viewed it as an effort to push him to resign. Months later, he did.

"The reassignment letter seemed clearly retaliatory," he said. "I was a top climate adviser, and they reassigned me to collect money from oil companies — come on."

Heather Swift, a spokeswoman for the Interior Department, said, "The president signed an executive order to reorganize the federal government for the future and the secretary has been absolutely out front on that issue." She said that Mr. Clement and others took their jobs "knowing that they could be called upon to work in different positions at any time."

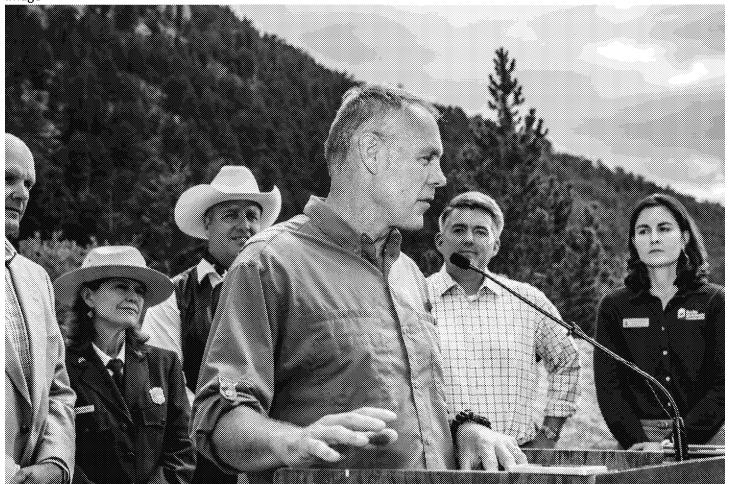
Ms. Swift did not respond to other questions about the agency.

In January, the majority of members of the Interior Department's National Park System Advisory Board, which advises on management of national parks, <u>resigned to protest</u> Trump administration policies. Tony Knowles, the former head of the board, said that Mr.

Zinke "appears to have no interest in continuing the agenda of science, the effect of climate change, pursuing the protection of the ecosystem."

ADVERTISEMENT

Image



Ryan Zinke, the secretary of the Interior Department, which has abruptly halted a study into links between surface mining and health.CreditRyan David Brown for The New York Times

Beyond the Interior Department, government scientists say they are feeling a rising indifference to their work, as well as occasional open hostility, that is triggering a brain drain.

Among the scientists who have chosen to move on is Ben Sanderson of the National Center for Atmospheric Research in Boulder, Colo., whose research focuses on the impact of climate change on society. In the Trump administration, "To talk about climate risk when connected to human activity is now a no-no if you want to get government funding," Dr. Sanderson said.

Last year, he saw a way out: the French government's "Make Our Planet Great Again" program. Dr. Sanderson was awarded a \$1.8 million, five-year grant to work for Météo-France, the national weather forecaster, at its campus in Toulouse.

"The French program was offering an opportunity to work on climate impacts — the work that's at the core of my research," Dr. Sanderson said. That kind of science, he said, "is increasingly difficult to do in the U.S."

Coral Davenport covers energy and environmental policy, with a focus on climate change, from the Washington bureau. She joined The Times in 2013 and previously worked at Congressional Quarterly, Politico and National Journal. <u>@CoralMDavenport</u> <u>Facebook</u>